



MANTLE MINING
ASX: MNM & MNMOA

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Non-Executive Chairman

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ASX Release

MANTLE MINING

14 February 2012

Barkly Phosphate Sale Option

Mantle Mining Corporation Limited (ASX: MNM) "Mantle", is pleased to advise that it has entered into an Option and Sale Agreement with Mineore Pty Ltd in relation to the Company's Barkly Phosphate Project tenements in the Northern Territory (see Figure on page 2):

Highlights:

In late 2009 early 2010, during recovery from the GFC, Mantle undertook a strategic review of its project areas in order to re-prioritise and re-focus its available resources on to commodity areas with the best medium term fundamentals. Coal and gold were determined to be the highest priority in terms of potential to add value to the company, whilst uranium and phosphate were considered longer term exploration plays.

A process was then undertaken to identify and add new coal projects to the company portfolio whilst seeking options for the orderly disposal of Mantle's uranium and phosphate tenements. Since then, Mantle has added the Bacchus Marsh, Latrobe Valley and Texas coal projects to its portfolio and reduced its exposure to uranium by exiting the Julia Creek, Burke and Clarke River uranium projects.

Today, Mantle is pleased to announce that it has entered into an Option and Sale Agreement with Mineore Pty Ltd, over the Barkly Phosphate Project tenements. Mineore is a resources company based in Brisbane, which is focused purely on exploration for fertiliser minerals such as potash and phosphate. The company has a number of assets in Queensland and the Northern Territory, including phosphate exploration licences in the Georgina Basin. The main terms of the Agreement are as follows:

- A 1 month Option period, extendible by an additional month,
- If Mineore determines to proceed with the acquisition, it will pay an initial amount of \$225,000 (escrowed until Tenement Title Transfer), plus
- A deferred payment of either \$200,000 value in shares post successful listing by Mineore, or \$400,000 in cash should Mineore not list within 24 months.

Although the global phosphate market has good long term fundamentals, Mantle remains of the view that its coal and gold project portfolio holds the best potential for short and medium term development success for the Company.

The Company is also of the view that the contemplated sale to Mineore will deliver a more focused approach to exploration on the Barkly Phosphate tenements and allow Mantle some ongoing exposure to any success that might be derived from Mineore's exploration.

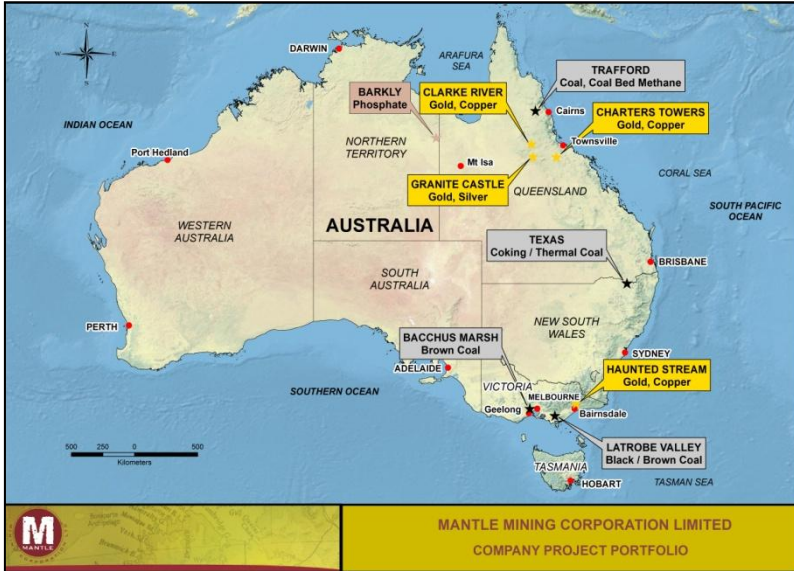
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MANTLE MINING CORPORATION LIMITED'S COMPANY PROJECT PORTFOLIO:



- ★ Granite Castle Gold & Silver (QLD)
- ★ Charters Towers Gold & Copper (QLD)
- ★ Haunted Stream Gold & Copper (VIC)
- ★ Clarke River Gold & Copper (QLD)
- ★ Trafford Coal & Coal Bed Methane (QLD)
- ★ Latrobe Valley Black & Brown Coal (VIC)
- ★ Bacchus Marsh Brown Coal (VIC)
- ★ Texas Black Coal (QLD)
- ★ Barkly Phosphate (NT)

QLD Gold Projects

The **Granite Castle** Project area contains a JORC Compliant (Measured, Indicated and Inferred) gold and silver Resource¹. Mineralisation occurs in a 600m long portion of a single shear. Over 6km of additional shears have been located, with drill holes and/or rock chip samples at similar grades to the JORC Compliant shear. The **Charters Towers** Project area contains the Great Britain JORC Compliant Inferred gold Resource² as well as a number of historic mines, including Day Dawn West, immediately west along strike of Citigold's (ASX: CTO) proposed "City" mining area. The Gromac/Puzzler area is prospective for deposits of copper, gold, silver and molybdenum. Review of prospectivity of the **Clarke River** Project has led to decision to relinquish in its entirety and this process has been commenced.

VIC Gold Projects

The **Haunted Stream** Project area is prospective for gold and copper including many historical, high-grade, gold mines along the Haunted Stream fault corridor. Deep drilling at centrally located Anomaly 4, a major target for possible deep vein gold or porphyry copper-gold mineralisation, intersected multiple shear zones with visible base metals.

QLD Coal Projects

The **Trafford** Project area contains a large Exploration Target³ of black coal. Mantle is negotiating with the traditional custodians of Mt Mulligan towards an Indigenous Land Use Agreement (ILUA) and has commenced proceedings in QLD's Supreme Court to enforce an agreement for assignment of the tenements from the prior tenement holders. The **Texas** Project area is prospective for both thermal and coking coals of a similar quality to Surat and Bowen Basin coals. The tenements are adjacent to the NSW border and along strike from known coking coal deposits and thermal coal drill intercepts located to the south and north.

VIC Coal Projects

The **Bacchus Marsh** Project area contains a large Exploration Target⁴ of brown coal surrounding the Maddingley mine. Mantle executed a Pre-JVA with Exergen Pty Ltd to develop the deposit utilising Exergen's patented Continuous Hydro-Thermal Dewatering (CHTD) technology. Exergen's partners include Tata Power, Itochu, Thiess and Sedgman. The **Latrobe Valley** Project area is prospective for both black and brown coal deposits including many historical mines within the Gippsland Basin. The tenements immediately about the main Latrobe Valley depression. There is a high level of prospectivity that the historic Wonthaggi Black coal seams exist at depth within the project area.

NT Phosphate Project

The **Barkly** Project area sits in the Georgina Basin between Minemaker's (ASX: MAK) Wonarah deposit and Phosphate Australia's (ASX: POZ) Highland Plains deposit. Historic phosphate rock intercepts exist within the tenements and Mantle is undertaking a series of annual drilling programs to more closely define the potential for covered deposits.

1, 2, 3 & 4: **Mineral Resource and Exploration Target tables and associated Competent Persons Statements on next page.**



MINERAL RESOURCES, EXPLORATION TARGETS and COMPETENT PERSONS STATEMENTS:

1. Granite Castle Gold & Silver Project:

Granite Castle Gold and Silver Resource Estimate @ 0.2 g/t Au lower cut-off					
Class	Tonnes	Au g/t	Au oz	Ag g/t	Ag oz
Measured	122,614	3.99	15,727	53.3	209,941
Indicated	264,021	3.44	29,198	67.6	574,182
Inferred	460,443	2.32	34,375	50.4	746,680
Total	847,078	2.91	79,301	56.2	1,530,803

Granite Castle Gold and Silver Exploration Target			
Target	Tonnes	Au g/t	Ag g/t
Below Granite Castle JORC Resource	300,000 – 400,000	2.5 – 3.5	55 - 70
Total	300,000 – 400,000	2.5 – 3.5	55 - 70

Statements in this report relating to the Granite Castle Gold and Silver Mineral Resource are based on a report provided to the Company by Hellman and Schofield Pty Ltd, dated 16th May 2008 and first released to the ASX by Mantle on 28th May 2008: "The information in this report that relates to Mineral Resources is based on information compiled by Dr William Yeo, a full time employee of Hellman and Schofield Pty Ltd. Dr Yeo is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Yeo consents to the inclusion of the matters based on his information in the form and context in which it appears in this report." The report also covered mineralised structures below the resource and quantified a contained exploration potential (Exploration Target) within those structures. Note that the potential quantity and grade of the Exploration Target is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource, and that it is uncertain if further exploration will result in the determination of a Mineral Resource

2. Charters Towers Gold Project:

Great Britain Gold Resource Estimate @ 0.5 g/t Au lower cut-off				
Class	Tonnes	Au g/t	Au oz	
Inferred	2,128,000	1.8	125,000	
Total	2,128,000	1.8	125,000	

Statements in this report relating to the Great Britain Gold Mineral Resource are based on a report provided to Glengarry Resources Ltd by Resource Evaluations Pty Ltd dated August 2004 and independently confirmed by Ravensgate Minerals Industry Consultants and included in Mantle's 2006 Prospectus as released to the ASX by Mantle on 2nd October 2006. The Resource Evaluations Pty Ltd report was compiled by Mr Mark Drabble, a Member of the Australasian Institute of Mining and Metallurgy and Mr Gerry Fahey, also a Member of the Australasian Institute of Mining and Metallurgy: "This report was completed under the overall supervision and direction of Gerry Fahey and the 3D modelling and Mineral Resource estimation was carried out by Mark Drabble both of whom are Competent Persons as defined by the Australasian Code for the Reporting of Mineral Resources and Ore reserves (JORC Code) 1999 edition and who consent to the inclusion in this report of the matters based on his information in the form and context in which it appears."

3. Trafford Coal Project:

Mount Mulligan Black Coal Exploration Target						
Target	Tonnes	TM %	Ash %	VM %	FC %	CV MJ/kg
Mulligan Sub-basin	100 Million – 500 Million	2 - 3	11 - 18	28 - 34	50 - 70	26 - 28
Total	100 Million – 500 Million	2 – 3	11 - 18	28 - 34	50 - 70	26 - 28

Statements in this report relating to the Mt Mulligan Coal Exploration Target are based on data provided to the Company by the vendors of the project, as first released in a report to the ASX by Mantle on 25th September 2007: "Under the Guidelines for the Estimation and Reporting of Australian Black Coal Deposits (1999), Mount Mulligan had an identified Class 1 deposit of 144m tonnes and an identified Class 2 deposit of 507m tonnes". Upon review of the geological data in consultation with Mantle's consultant geologists, it was considered appropriate that the range of the Exploration Target be considered as 100m to 500m tonnes. Information in this report that relates to Exploration Results is based on information compiled by Mr Ian Kraemer an Executive of Mantle Mining Corporation Ltd. Mr Kraemer is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Kraemer consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. In addition, Mr Kraemer notes that the potential quantity and grade of the Black Coal Exploration Target is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource, and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

4. Bacchus Marsh Coal Project:

Bacchus Marsh Brown Coal Exploration Target					
Target	Tonnes	TM %	Ash %		
Parwan Sub-basin	1 Billion – 2 Billion	35 – 61	4 - 11		
Total	1 Billion – 2 Billion	35 – 61	4 - 11		

Statements in this report relating to the Bacchus Marsh Brown Coal Exploration Target are based on preliminary review of existing data and drill hole logs as first released in a report to the ASX by Mantle on 17th June 2010: "Information in this report that relates to Exploration Results is based on information compiled by Mr Ian Kraemer an Executive of Mantle Mining Corporation Ltd. Mr Kraemer is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Kraemer consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. In addition, Mr Kraemer notes that the potential quantity and grade of the Brown Coal Exploration Target is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource, and that it is uncertain if further exploration will result in the determination of a Mineral Resource."